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In re Patent Application of

MAERTENS et al.

Atty. Ref.: 2551-69

Serial No. 09/995,860

Group: 1648

Filed: November 29, 2001

Examiner:

For: PURIFIED HEPATITIS C VIRUS ENVELOPE PROTEINS  
FOR DIAGNOSTIC AND THERAPEUTIC USE

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\* \* \* \* \*

April 16, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**INFORMATION DISCLOSURE STATEMENT**

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited by or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

Applicants have checked the appropriate boxes below.

1. ☒ This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No statement under 37 C.F.R. § 1.97(e) or fee is required. In the event, a first Office Action has been mailed prior to filing of the present Information Disclosure Statement, the Office is requested to treat the present paper s a submission under 37 C.F.R. § 1.97(c) and charge the undersigned's Deposit Account No. 14-1140 for the fee required by 37 C.F.R. § 1.17(p). The present paper is submitted in duplicate for this purpose.

2. ☐ This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

- a. ☐ I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- b. ☐ I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- c. ☐ Attached is our Check No. in the amount of \$ in payment of the fee under 37 C.F.R. § 1.17(p).
3. ☐ This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. It is hereby requested that the Information Disclosure Statement be considered. Attached is our Check No. in the amount of \$ in payment of the fee under 37 C.F.R. § 1.17(i).
- a. ☐ I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- b. ☐ I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
4. ☐ Relevance of the non-English language document(s) is discussed in the present specification.
5. ☐ The document(s) was/were cited in a corresponding foreign application. An English language version of the foreign search report is attached for the Examiner's information.
6. ☐ A concise explanation of the relevance of the non-English language document(s) appears below:
7. ☐ The Examiner's attention is directed to co-pending U.S. Patent Application No. , filed , (copy attached) which is directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy

as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

8. ☐ Copies of the documents were cited by or submitted to the Office in Application No. , filed , which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

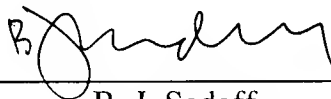
It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 14-1140 referencing docket number 2551-69.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: \_\_\_\_\_



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INFORMATION DISCLOSURE  
CITATION

ATTY. DOCKET NO.

2551-69

APPLICANT

MAERTENS et al.

FILING DATE

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SERIAL NO.

09/995,860

GROUP

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(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,610,009	3/1997	Watanabe et al			
	5,514,539	5/1996	Bukh et al			
	5,919,454	7/1999	Brechot			
	5,308,750	5/1994	Mehta et al			
	5,871,962	2/1999	Bukh et al			
	5,830,691	3/1998	Miyamura et al			
	5,942,234 A	8/1999	Ralston et al			
	6,150,134 A	11/2000	Maertens et al			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
✓	WO 93/15193	8/1993	PCT			
✓	WO 93/02103	2/1993	PCT			
✓	WO 93/04205	3/1993	PCT			
✓	WO 92/08734	5/1992	PCT			
	WO 98 21338 A	5/1998	WIPO			
	WO 96 04385 A	2/1996	WIPO			

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

	Choo et al, "Vaccination of Chimpanzees Against ... Hepatitis C Virus", Proc. Natl. Acad. Sci., 1994, pp. 1294-1298.
	Lanford et al, "Analysis of Hepatitis C Virus ...", Virology 197, pp. 225-235, 1993.
	Nishihara et al, "Secretion and Purification of Hepatitis C ...", Gene 129: 207-214, 1993.
	Ralston et al, "Characterization of Hepatitis C Virus ...", J. Virol 67:6753-6761, 1993.
	BOSMAN F ET AL: 'Purification of the hepatitis C virus envelope proteins and analysis of their oligomeric state.' 48TH ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, CHICAGO, ILLINOIS, USA, NOVEMBER 7-11, 1997. HEPATOLOGY 26 (4 PART 2). 1997. 412A, XP002087226 see abstract 1136.
	Ristoni et al, Compositional bias and mimicry toward the nonself proteome in immunodominant T cell epitopes of self and nonself antigens. FASEB (2000) Vol. 14, No. 3, pp. 431-438.
	Paul, Fundamental Immunology, Raven Press, New York, NY 1993, 3 <sup>rd</sup> Edition, pg. 251, column 1, lines 11-12.
	Baumert et al, Hepatitis C virus structural proteins assemble into virus like particles in insect cells. Journal of Virology (May 1998) Vol. 72, No. 5. pp. 3827-3836.

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Form PTO-FB-A820 (Also PTO-1449)